

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A paper feeding apparatus, comprising:
 - a paper feed device comprising:
 - a paper loading board to load paper obliquely;
 - an abutting surface arranged in a lower part of the paper loading board, the abutting surface abuts a leading edge of the paper loaded on the paper loading board;
 - a feed roller abuts a surface of the paper to feed the paper to a predetermined direction sheet by sheet; and
 - a manual feed tray ~~openably/closably attached to the paper loading board;~~ movable between an open position and a closed position;
 - a stopper movable between a lower position lower than the abutting surface and a higher position higher than the abutting surface; and ~~located at a lower position when the paper is fed from the manual feed tray, the stopper arranged to move vertically with respect to the abutting surface to contact the leading edge of the paper and lift up the leading edge of the paper when positioned higher than the abutting surface; and~~
 - a stopper drive device which moves the stopper between the lower position and the higher position, ~~lowers the stopper below the abutting surface when the manual feed tray is opened for paper insertion.~~
 - wherein the stopper contacts the leading edge of the paper and lifts up the leading edge of the paper as the stopper is moved toward the higher position, and
 - wherein the stopper drive device moves the stopper toward the lower position in response to the manual feed tray being at or moving to the open position.

2. (Currently Amended) The paper feeding apparatus according to Claim 1, wherein the stopper drive device comprises a linking mechanism arranged between the manual feed tray and the stopper to move the stopper toward the lower position as the manual feed tray is moved to the open position.~~lower the stopper when the manual feed tray is opened for paper insertion.~~

3. (Currently Amended) The paper feeding apparatus according to Claim 2, wherein the stopper drive device further comprises:

- a rotational shaft facing the stopper as the linking mechanism;
- a cam fixed on the rotational shaft; and
- a projection portion fixed on one axial end of the rotational shaft; and

wherein the stopper comprises:

- a stopper body abuts the leading edge of the paper loaded on the paper loading board; and
- an abutting unit extends from the stopper body and abuts the cam to provide vertical movement to the stopper body depending on a position of the cam;

wherein the manual feed tray pushes the projection portion when ~~opened in the~~ open position for a paper insertion, and

wherein the cam moves to another position to lower the stopper body when the projection portion is pushed.

4. (Currently Amended) The paper feeding apparatus according to Claim 3, further comprising:

- a change detection device to detect a change in ~~an~~ the open/closed state position of the manual feed tray; and
- a control device operably connected to the stopper drive device to permit the stopper drive device to raise the stopper when the change detection device detects that the

state of the manual feed tray has changed from the open ~~state-position~~ to the closed ~~state-position~~.

5. (Currently Amended) The paper feeding apparatus according to Claim 1, further comprising:

a change detection device to detect a change in ~~an~~ the open/closed ~~state position~~ of the manual feed tray; and

a control device operably connected to the stopper drive device to permit the stopper drive device to lower the stopper when detecting that the state of the manual feed tray has changed from the closed ~~state-position~~ to the open ~~state-position~~ to permit the paper insertion.

6. (Currently Amended) The paper feeding apparatus according to Claim 5, wherein the control device permits the stopper drive device to raise the stopper when the change detection device detects that the state of the manual feed tray has changed from the open ~~state-position~~ to the closed ~~state-position~~.

7. (Currently Amended) The paper feeding apparatus according to Claim 4, the stopper drive device further comprising:

a first gear arranged on one axial end of the rotational shaft to rotate with the rotational shaft;

a second gear geared with the first gear; and

a rotational force transmission device to transmit rotational force given from a driving source to the second gear;

wherein the control device drives the driving source so that the cam moves to a position to lower the stopper body when the manual feed tray is ~~opened~~ in the open position to permit paper insertion, and to another position to raise the stopper body when the manual feed tray is not ~~opened~~ in the open position.

8. (Currently Amended) The paper feeding apparatus according to Claim 7, wherein the second gear comprises a rotation limit device which does not transmit a rotational force to the first gear in a descendent direction of the stopper after the stopper is ~~lowered in~~ the lower position.

9. (Currently Amended) An image formation apparatus, comprising:
a paper feeding apparatus including:
a paper feed device comprising:
a paper loading board to load paper obliquely;
an abutting surface arranged in a lower part of the paper loading board, the abutting surface abuts a leading edge of the paper loaded on the paper loading board;
a feed roller abutting a surface of the paper to feed the paper to a predetermined direction sheet by sheet; and
a manual feed tray ~~openably/closably attached to the paper loading board;~~ movable between an open position and a closed position;
a stopper movable between a lower position lower than the abutting surface and a higher position higher than the abutting surface; ~~and located at a lower position when the paper is fed from the manual feed tray, the stopper arranged to move vertically with respect to the abutting surface to contact the leading edge of the paper and lift up the leading edge of the paper when positioned higher than the abutting surface; and~~
a stopper drive device which moves the stopper between the lower position and the higher position; ~~lowers the stopper below the abutting surface when the manual feed tray is opened for paper insertion;~~
an image formation device which forms an image on the paper;

a paper transfer device transfers paper fed from the paper feeding apparatus to the image formation device;

a paper detection device arranged in the paper transfer device detects when paper is fed to the paper transfer device; and

a feed control device drives the paper feeding apparatus to feed the paper on the paper loading board to the paper transfer device when a command to select an automatic paper feed is externally ~~inputted~~~~input~~ to select a paper feed from the paper loading board, subsequently drives the paper transfer device to transfer the paper fed from the paper feeding apparatus to the image formation device when the paper detection device detects the presence of paper, and drives the paper transfer device to transfer paper inserted from the manual feed tray to the image formation ~~device, device.~~

wherein the stopper contacts the leading edge of the paper and lifts up the leading edge of the paper as the stopper is moved toward the higher position, and

wherein the stopper drive device moves the stopper toward the lower position in response to the manual feed tray being at or moving to the open position.

10. (Currently Amended) The image formation apparatus according to Claim 9, further comprising:

an opening/closing detection device to detect whether the manual feed tray is in the open position for inserting paper; and

a first annunciation device operably connected to the image formation apparatus prohibits the process of the feed control device and announces that paper is jammed within the image formation apparatus when a command to select an automatic paper feed is ~~input, inputted~~, if the opening/closing detection device detects that the manual feed tray is not in the open position and the paper detection device detects the presence of paper.

11. (Currently Amended) The image formation apparatus according to Claim 9, further comprising:

an opening/closing detection device to detect whether the manual feed tray is in the open position for inserting paper; and

a first annunciation device announces a requirement for a paper insertion from the manual feed tray when a command to select a manual paper feed is externally ~~input~~,inputted, if the opening/closing detection device detects that the manual feed tray is in the open position to permit the paper insertion, and if the paper detection device detects that paper has not been fed.

12. (Currently Amended) The image formation apparatus according to Claim 9, further comprising:

an opening/closing detection device to detect whether the manual feed tray is in the open position to permit the paper insertion;

a command input device for inputting a feed initiation command, the feed initiation command initiates a paper feed from the manual feed tray; and

a first annunciation device to announce a requirement for an input of the feed initiation command when a command to select a manual paper feed is externally ~~input~~,inputted, if the opening/closing detection device detects that the manual feed tray is ~~open~~-in the open position to permit the paper insertion, and the paper detection device detects the presence of paper, wherein the feed control device allows the paper transfer device to initiate a paper transfer when the feed initiation command is inputted from the command input device.

13. (Currently Amended) The image formation apparatus according to Claim 9, further ~~comprising~~: ~~comprising~~
a change detection device,
wherein a driving source which drives the paper transfer device is configured to execute a predetermined preprocess other than a paper transfer prior to an image formation when driving the paper transfer device in an opposite direction to a direction of paper transfer; and

the feed control device executes the preprocess by driving the driving source in the opposite direction when the change detection device detects that a state of the manual feed tray has changed from a ~~closed state to an open state~~ the closed position to the open position to permit the paper insertion.

14. (Currently Amended) A computer-readable storage medium storing thereon a control program executable by a processor controlling the paper feeding apparatus according to Claim 4, the program comprising:

detecting a change in ~~an~~ the open/closed state-position of the manual feed tray;
and

raising the stopper when the detection of the manual feed tray has changed from the open ~~state-position~~ to the closed-state-position.

15. (Currently Amended) A computer-readable storage medium storing thereon a control program executable by a processor controlling the image formation according to Claim 10, the program comprising:

detecting whether the manual feed tray is in the open position for inserting paper; and

prohibiting the process of the feed control device and announcing that paper is jammed within the image formation apparatus when selection of an automatic paper feed is

inputted, if the detection of the manual feed tray is not in the open position and the presence of paper is detected.

16. (Currently Amended) A computer-readable storage medium storing thereon a control program executable by a processor controlling the image formation according to Claim 11, the program comprising:

detecting whether the manual feed tray is in the open position for inserting paper; and

announcing a requirement for a paper insertion from the manual feed tray when the selection of the manual paper feed is externally inputted, if the detection of the manual feed tray is in the open position to permit the paper insertion, and if the paper has not been fed.

17. (Currently Amended) A computer-readable storage medium storing thereon a control program executable by a processor controlling the image formation apparatus according to Claim 12, the program comprising:

detecting whether the manual feed tray is in the open position to permit the paper insertion;

initiating a paper feed from the manual feed tray; and

announcing a requirement for an input of the feed initiation command when the selection of a manual paper feed is externally inputted, if the detection of the manual feed tray is in the open position to permit the paper insertion, and the presence of paper is detected, and initiating a paper transfer when the feed initiation command is inputted.

18. (Currently Amended) A computer-readable storage medium storing thereon a control program executable by a processor controlling the image formation according to Claim 13, the program comprising:

executing a predetermined preprocess other than a paper transfer prior to an image formation when driving the paper transfer device in an opposite direction to a direction of paper transfer; and

executing the preprocess by driving the driving source in the opposite direction when detecting a state of the manual feed tray has changed from ~~a~~the closed state-position to ~~an~~the open state-position to permit the paper insertion.

19. (Previously Presented) The paper feeding apparatus according to Claim 1, wherein the stopper raises and lowers each time the paper is fed from the paper loading board.

20. (Previously Presented) The paper feeding apparatus according to Claim 1, wherein the stopper drive device rotates to move the stopper vertically with respect to the abutting surface.

21. (Previously Presented) The image formation apparatus according to Claim 9, wherein the stopper drive device rotates to move the stopper vertically with respect to the abutting surface.